

wash^{plus} Weekly

Supportive Environments for Healthy Communities

Issue 216 | Jan. 8, 2016 | Q&A with Adam Creighton



Adam Creighton, the development director of InStove, kindly answered several questions for this issue of the WASHplus Weekly. He welcomes further questions and comments: Adam@instove.org

Please give us a brief introduction to InStove, when it was founded, the types of cookstoves, etc.

InStove is a 501(c)(3) nonprofit organization dedicated to the design and distribution of improved cookstoves and allied technology to vulnerable communities worldwide.

Our mission also includes public education and outreach on the harmful impacts of open-fire cooking on climate, forests, local economies, and public health.

Since 2010, we've been distributing the [most efficient solid-fuel stove in the world](#) (according to the Global Alliance for Clean Cookstoves' catalog of stoves with third-party test scores, available here: catalog.cleancookstoves.org/stoves).

Our stoves come in two sizes, 60 liter and 100 liter. These stoves are suitable for institutional cooking and have additional applications that include [health](#) (sterilization of medical supplies and waste), [agriculture](#) (poultry, shea butter, mushroom-growing, canning, soap manufacture, etc.), [clean water](#) (through a high-capacity water pasteurizer capable of producing 800 liters of clean water per hour using minimal amounts of solid fuel), and income generation (through microbusinesses using our technology) and the ability to manufacture stoves locally, in-country.

What lessons have you learned bringing production of stoves to Africa?

The last 30 years have seen a lot of stove projects fail when funding (philanthropic, aid-based, or private investment) runs out. This is why, for the sustainability of any project, the end-goal **must** be local production that relies on local materials (to the extent possible) and expertise, and creates local jobs.

From the beginning, InStove has built a production model that is replicable in the developing world: a high-tech/low-tech production methodology with low capital requirements that is fully exportable.

In the household biomass stove sector, we've seen several companies embrace the local production model. [Potential Energy](#), based in the U.S., trains (primarily) refugee women to assemble and sell stoves—a model that it developed in Sudan, a challenging place to do business (159 out of 189 in The World Bank's "Doing Business" rankings).

[Africa Clean Energy](#), based in Lesotho, builds **the best** household biomass stove in the world (against the International Standards Organization/International Workshop Agreement [ISO/IWA] for clean cookstoves), which is also capable of generating current (e.g., for cell phone charging or LED lights). Africa Clean Energy can ship its best-in-class, fuel-flexible stoves "flat-packed" to other countries for local assembly.

Most impressively, [Burn Manufacturing](#) has opened the most sophisticated, modern stove production facility in Kenya, to produce its best-in-class household charcoal stove (using primarily local materials) at a cost that can be supported by the local market without the need for subsidies (e.g., carbon credits, vouchers, or philanthropic support).

Finally, [Stove Team International](#), with help from Rotary and grassroots funders in the U.S., has opened several stove factories in Latin America that produce improved, household wood stoves appropriate for the local cuisine, using all local materials and personnel.

The model of building stoves cheaply in places like China and India, exporting them *en masse* to other LDCs [least developed countries] and dumping them on consumers (often with partial or total subsidies) is possibly the most damaging thing we can do.

This destroys markets (by putting local stove builders out of business); it destroys the aspirational value of owning a stove; it does not generate the local expertise needed to service the stoves; and when the stoves are untested, unproven, or of low quality, such projects do a disservice to the company and to the sector as a whole by discrediting the idea that cookstoves are "improved" to begin with.

This may be one reason many African families with limited resources would prefer (for example) new cell phones to a new stove, despite the clear health and economic benefits of the stove.

Do you have any additional comments about the household energy sector, key issues, etc.?

I think that more attention needs to be paid to the significant work of the Global Alliance for Clean Cookstoves in this regard and their [Clean Cookstoves Catalog](#). This compiles into a single tool a massive clean cookstove dataset, including photos, availability in different markets, and most importantly—third-party ISO/IWA testing scores.

The ISO/IWA for clean cookstoves is a set of standards that measure emissions, fuel-efficiency, and safety in a way that is comparable across fuel and stove types.

I think that all stakeholders—from investors and funders to customers and end-users themselves—need to pay more attention to these third-party measurements of stove quality.

The world finally has a standardized, comparable way to measure how improved an "improved

cookstove” really is.

At the [ETHOS conference](#) in Kirkland, Washington, in 2015, I heard from longtime stove professional Christa Roth that (largely as result of GIZ's sustained work in clean cookstoves) in much of Africa, the Kenyan Ceramic Jiko—not the three-stone fire—is now the baseline.

Wouldn't it be nice if a stove that tested better than tier 1 (tier 2 at best) were to become the new baseline? Aren't the impacts, and not simply the numbers or the money, the most important thing to consider?

I think informing funders and customers of how different stoves stack up (no pun intended) will lead to better decisions for health, safety, the environment, and economic returns. And I think this will move the needle toward the best technology and toward models that produce it locally.

WASHplus Weeklies highlight topics such as Urban WASH, Household Air Pollution, Innovation, Household Water Treatment and Storage, Handwashing, Integration, and more. If you would like to feature your organization's materials in upcoming issues, please send them to Antonia Wolff, WASHplus Knowledge Management Advisor, at awolff@fhi360.org.



About WASHplus - WASHplus, a multi-year project funded through USAID's Bureau for Global Health, supports healthy households and communities by creating and delivering interventions that lead to improvements in access, practice and health outcomes related to water, sanitation, hygiene (WASH) and household air pollution (HAP). WASHplus uses at-scale, targeted as well as integrated approaches to reduce diarrheal diseases and acute respiratory infections, the two top killers of children under five years of age globally. For information, visit www.washplus.org or email: contact@washplus.org.